

CLAIMS

1. Use of an aqueous solution or slurry comprising at least one alkylene glycol polymer and/or at least one  
5 alkylene glycol copolymer in which the alkylene(s) has (have) from 2 to 6 carbon atoms, for trapping ruthenium present in a gaseous effluent.
2. Use according to Claim 1, in which the alkylene  
10 glycol polymer is selected from the group consisting of polyethylene glycol, polypropylene glycol, polybutylene glycol, or a blend of these.
3. Use according to Claim 1, in which the alkylene  
15 glycol copolymer is a copolymer consisting of polymers selected from the group consisting of polyethylene glycol, polypropylene glycol and polybutylene glycol or a blend of these.
- 20 4. Use according to Claim 1, in which the alkylene glycol copolymer is a copolymer based on ethylene glycol, propylene glycol and butylene glycol.
- 25 5. Use according to Claim 1 or 3, in which the alkylene glycol copolymer is of the following formula (I):
- $$\text{HO}-(\text{CH}_2-\text{CH}_2\text{O})_m-(\underset{\text{CH}_3}{\text{CH}}-\text{CH}_2\text{O})_p-(\text{CH}_2-\text{CH}_2\text{O})_m-\text{H}$$
- in which m and p are integers such that, independently,  
1 ≤ m ≤ 8 and 3 ≤ p ≤ 12.
- 30 6. Use according to Claim 1 or 5, in which the alkylene glycol copolymer is an ethylene glycol/propylene glycol copolymer.
- 35 7. Use according to Claim 1, in which the aqueous solution or slurry is placed on a substrate made of fibres.

8. Use according to Claim 7, in which the substrate consists of a glass wool or a stainless steel wool.

5 9. Use according to Claim 7, in which the alkylene glycol polymer or the alkalene glycol copolymer is placed on the said substrate by dipping the substrate into an aqueous solution of the said polymer or of the said copolymer.

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10. Use according to Claim 1, in which the alkylene glycol polymer or alkylene glycol copolymer has hydroxyl end groups.

15 11. Ruthenium-trapping cartridge, the said cartridge comprising a substrate on which an alkylene glycol polymer or an alkylene glycol copolymer is placed, in which the alkylene(s) has (have) from 2 to 6 carbon atoms.

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12. Cartridge according to Claim 11, in which the alkylene glycol polymer is selected from the group consisting of polyethylene glycol, polypropylene glycol and polybutylene glycol.

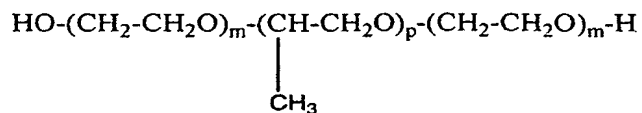
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13. Cartridge according to Claim 11, in which the alkylene glycol copolymer is a copolymer consisting of polymers selected from the group consisting of polyethylene glycol, polypropylene glycol and  
30 polybutylene glycol.

14. Cartridge according to Claim 11, in which the alkylene glycol copolymer is a copolymer based on ethylene glycol, propylene glycol and butylene glycol.

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15. Cartridge according to Claim 11 or 12, in which the alkylene glycol copolymer is of the following formula (I):



in which m and p are integers such that, independently,  
 $1 \leq m \leq 8$  and  $3 \leq p \leq 12$ .

- 5 16. Cartridge according to Claim 11 or 15, in which the alkylene glycol copolymer is an ethylene glycol/propylene glycol copolymer, of a copolymer.
- 10 17. Cartridge according to Claim 11, in which the substrate consists of fibres.
- 15 18. Cartridge according to Claim 11, in which the substrate consists of a glass wool or a stainless steel wool.
- 20 19. Cartridge according to Claim 11, 17 or 18, in which the said alkylene glycol polymer or the said alkylene glycol copolymer is placed on the said surface by dipping the substrate into an aqueous solution of the said polymer or of the said copolymer.
- 25 20. Cartridge according to Claim 11, the said cartridge furthermore including a structure that supports the substrate on which the alkylene glycol polymer or copolymer is placed.
- 30 21. Cartridge according to Claim 11, comprising:  
- the substrate on which the alkylene glycol polymer or copolymer is placed, the said surface being in the form of glass wool or stainless steel wool;  
- a structure supporting the said substrate on which the alkylene glycol polymer or copolymer has been placed; and  
- peripheral means for sealing the said cartridge, making it necessary for the gaseous effluent to pass through the said substrate.
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22. Use according to Claim 1, in which the aqueous solution is added to the scrubbing water of a gas scrubbing unit.